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# PARTS CATALOG

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FOR

ONAN ELECTRIC  
GENERATING PLANTS

*Model*

**WC4-7.5S**  
**(WC-7.5S)**

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**D. W. ONAN & SONS INC. • MINNEAPOLIS 14, MINN.**

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918-52▲

INSTRUCTIONS FOR ORDERING  
REPAIR PARTS

FOR PARTS OR SERVICE, CONTACT THE DEALER FROM WHOM YOU PURCHASED THIS EQUIPMENT OR REFER TO YOUR NEAREST AUTHORIZED SERVICE STATION.

TO AVOID ERRORS OR DELAY IN FILLING YOUR PARTS ORDER, PLEASE FURNISH ALL INFORMATION REQUESTED.

1. Always give the MODEL and SERIAL NO. If Unit has had a replacement Engine use the information on the Replacement Engine Nameplate, not the Original Nameplate.
2. Order only parts that have a quantity shown under the "Parts Reference Letter" that applies to your plant. These letters are listed under "Quantity Used" in the parts list. "Parts Reference Letters" are given in the Data Table.
3. Do not order by reference number or group number, use part number and description.
4. Give the part number, description and quantity needed of each item. If an old part cannot be identified, return the part prepaid to your dealer or nearest AUTHORIZED SERVICE STATION. Print your name and address plainly on the package. Write a letter to the same address stating the reason for returning the part.
5. State definite shipping instructions.

Any claim for loss or damage to your unit in transit should be filed promptly against the transportation company making the delivery. Shipments are complete unless the packing list indicates items are back ordered.

"Prices are purposely omitted from this Parts Catalog due to the confusion resulting from fluctuating costs, import duties, sales taxes, exchange rates, etc.

For Current parts prices, consult your Onan Dealer, Distributor or Parts and Service Center."

"En esta lista de partes los precios se omiten de proposito, ya que bastante confusion resulta de fluctuaciones de los precios, derechos aduanales, impuestos de venta, cambios extranjeros etc.

Consiga los precios vigentes de su distribuidor de productos "ONAN".

**IMPORTANT!**

In many cases the original engine as supplied has been replaced by a complete replacement. Each replacement engine carries its own nameplate stating the correct number of the engine.

Check engine nameplate. If engine is a replacement use the correct column that corresponds with the replacement number on the engine nameplate. If no engine replacement has been supplied use "Parts Reference Letter" A

When ordering parts use the complete part number as supplied including any suffix letters in parenthesis.

ENGINE†	PARTS REFERENCE LETTER
Original (FM)8NNN-1004	A
Replacement 100A98	B
Replacement 100A148	C
Replacement 100A156	D
Replacement 100A164	E
Replacement 100A168	F

† = For replacement of complete engine use 100A168.

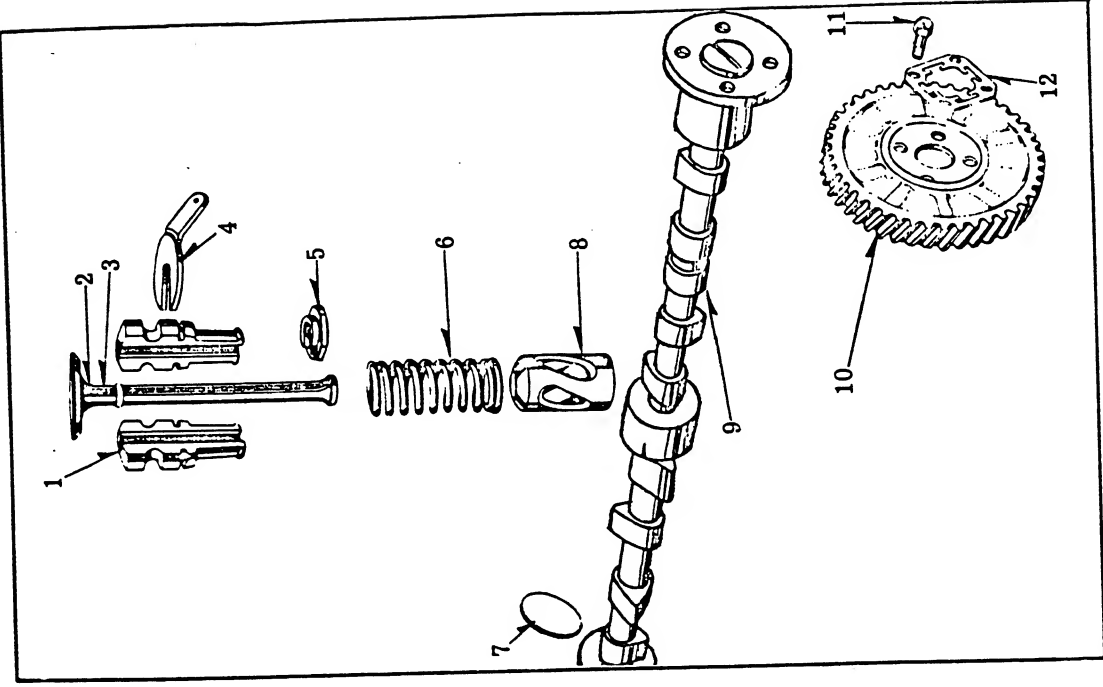


FIG.2 VALVE AND CAMSHAFT GROUP

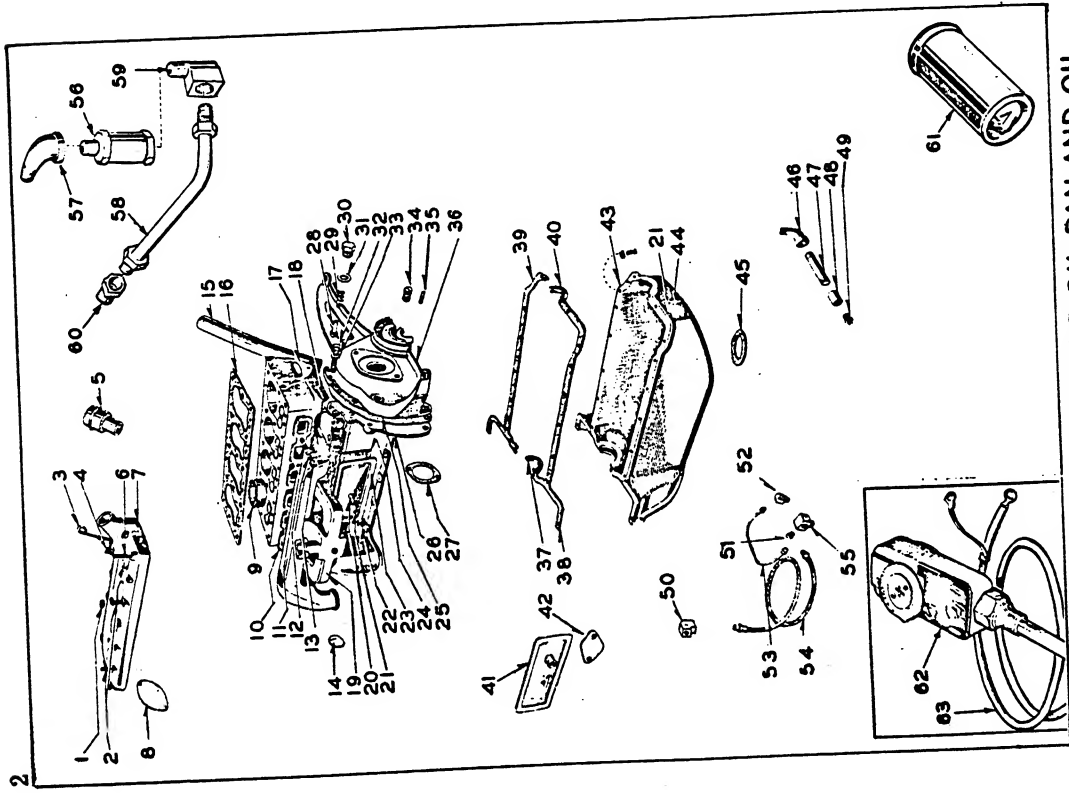


FIG.1-CYLINDER,MANIFOLD,OIL PAN AND OIL DRAIN GROUP

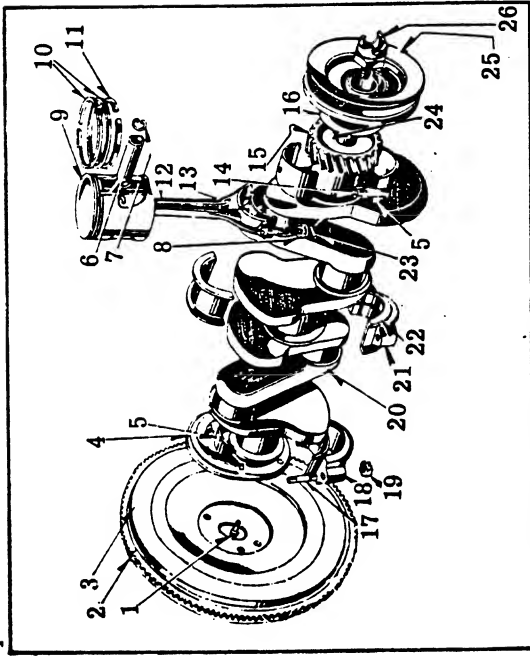


FIG.3 FLYWHEEL,CRANKSHAFT AND PISTON GROUP

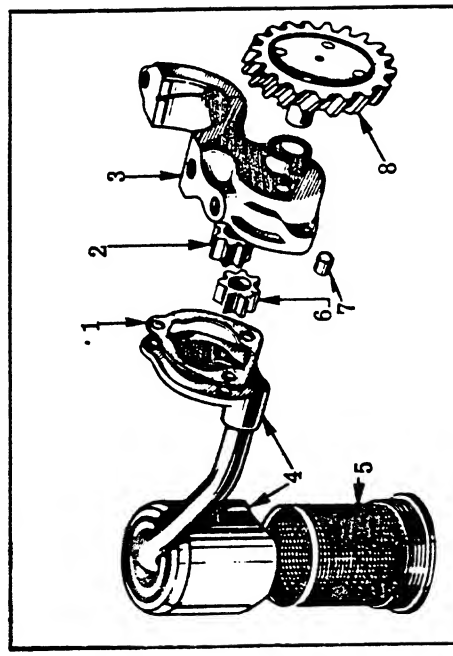


FIG.4 OIL PUMP GROUP

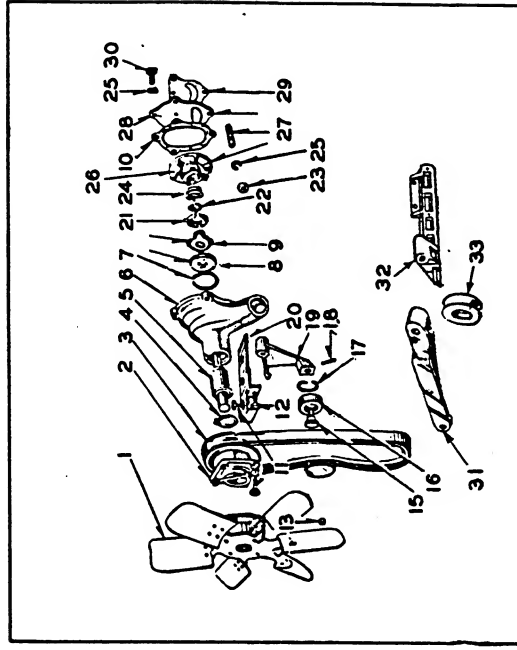
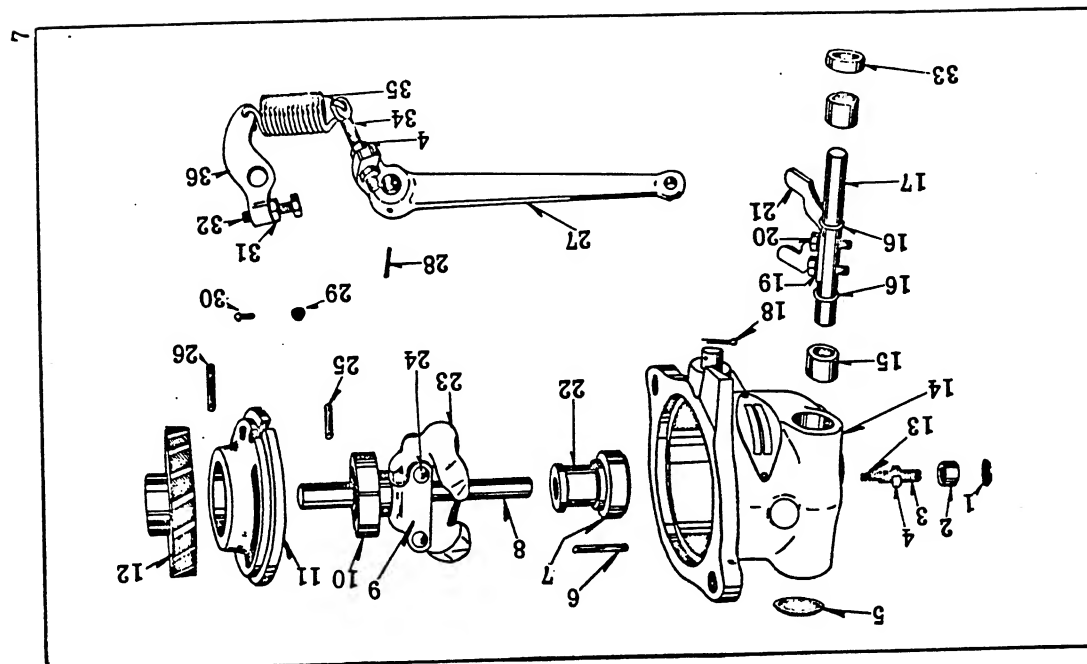
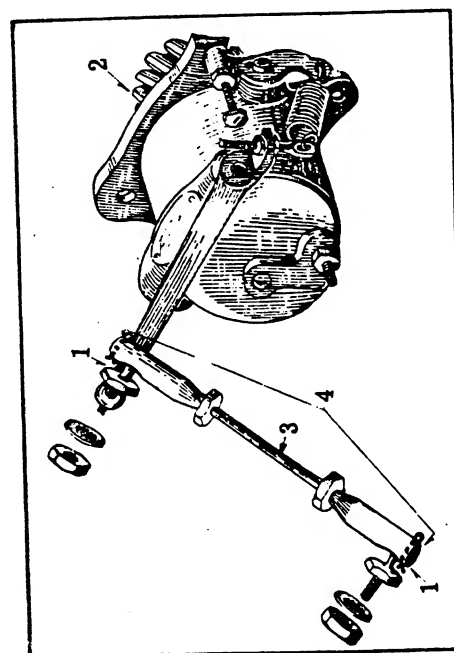
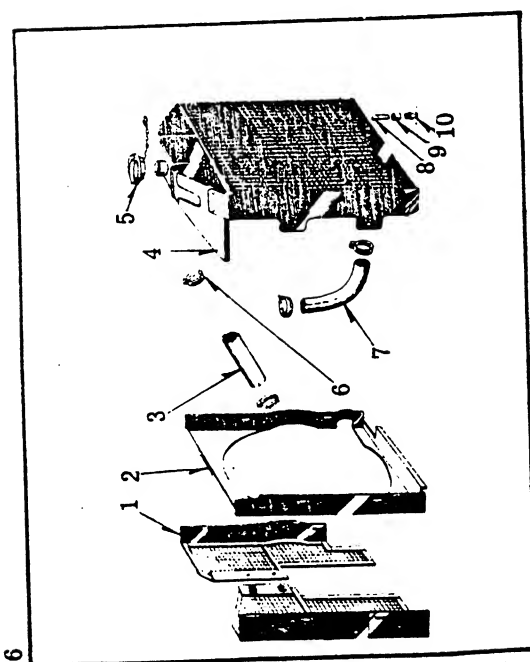
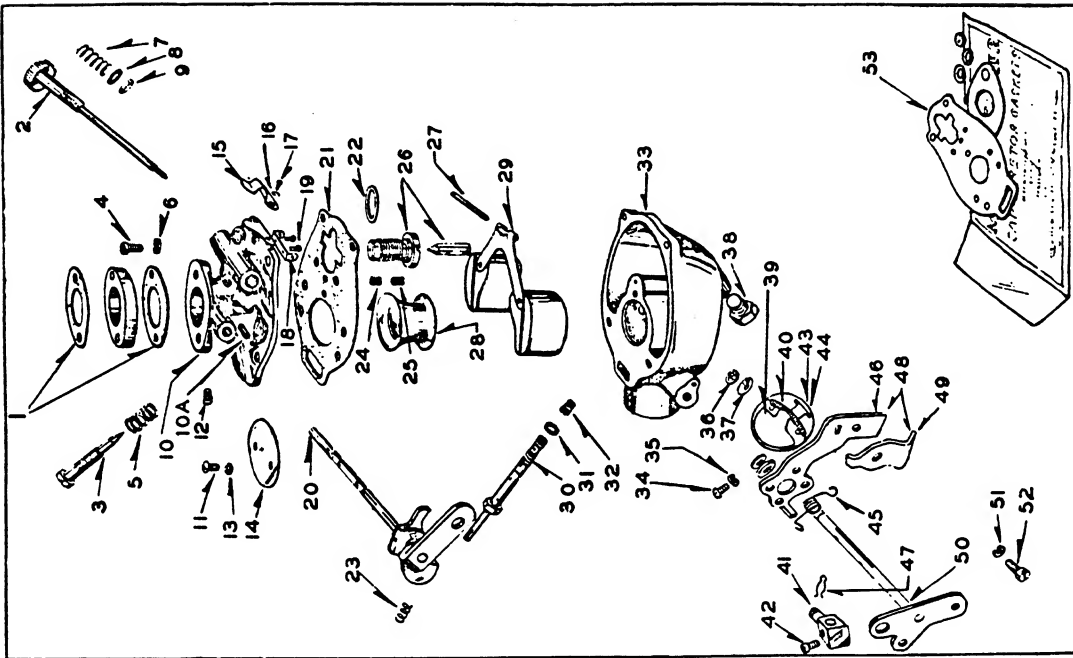
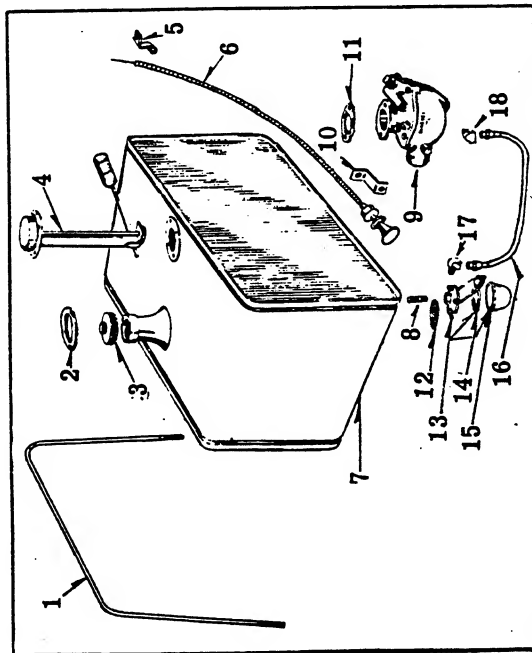


FIG.5 WATER PUMP,FAN AND IDLER GROUP





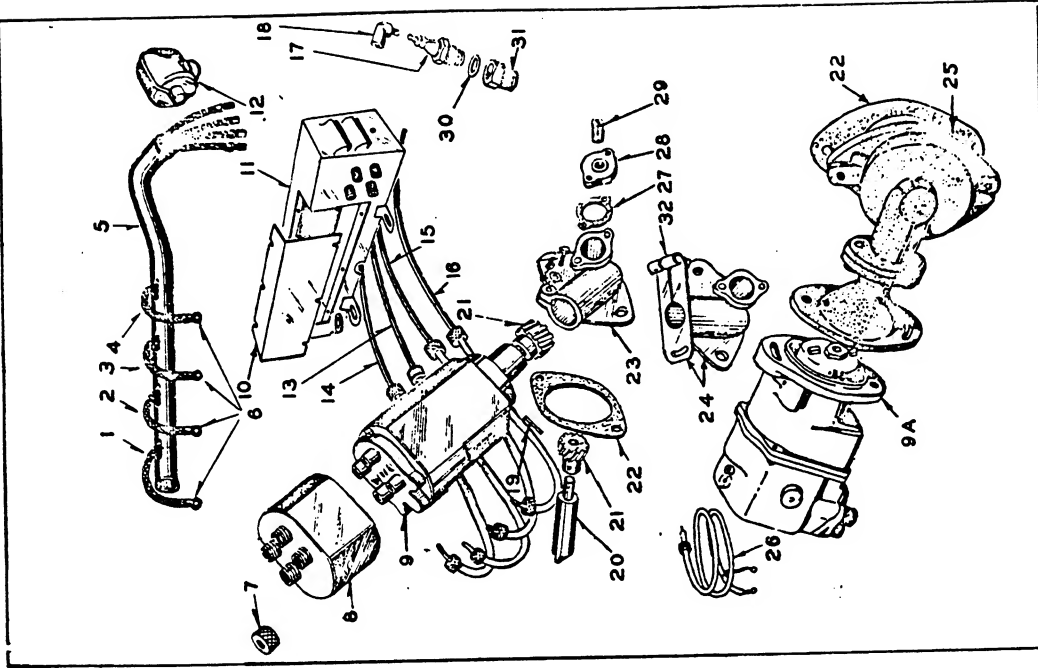


FIG.13 IGNITION GROUP

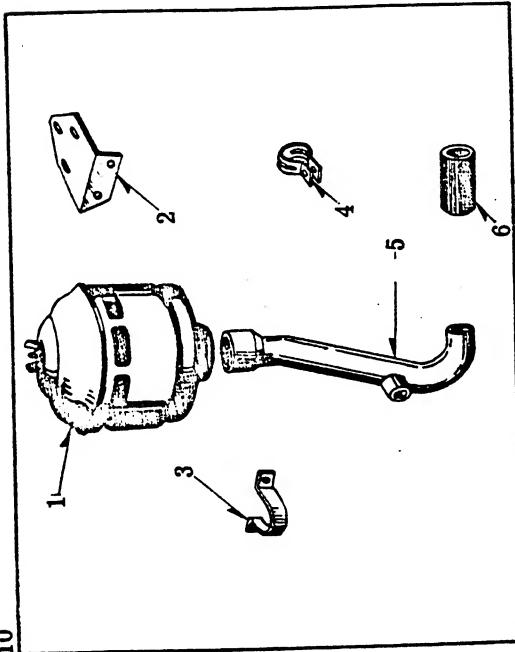


FIG.11 AIR CLEANER GROUP

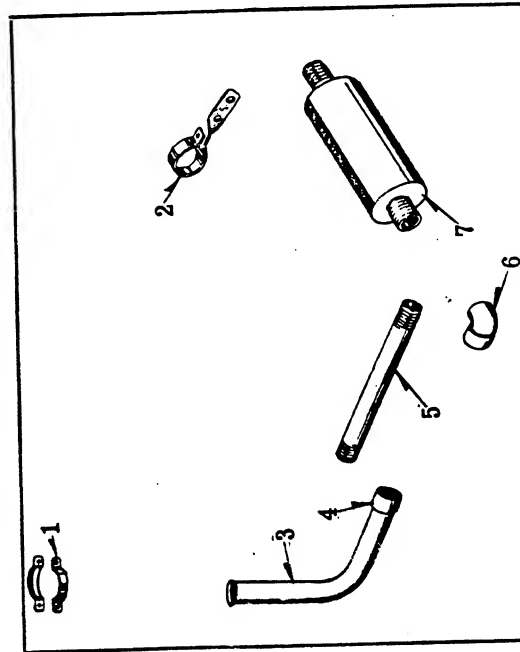


FIG.12 MUFFLER GROUP

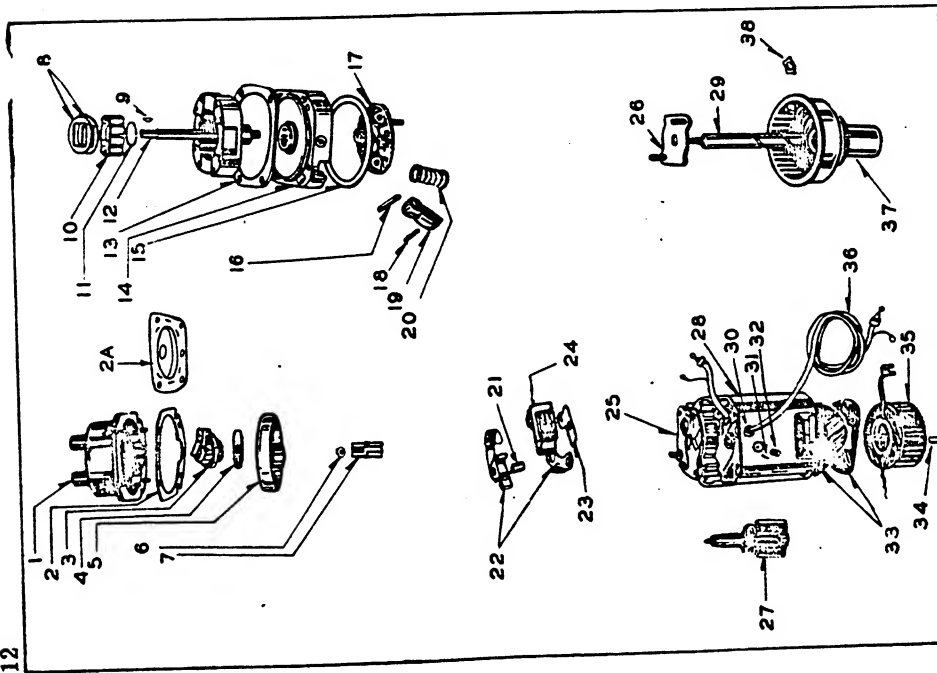


FIG.14 WICO MAGNETO PARTS GROUP

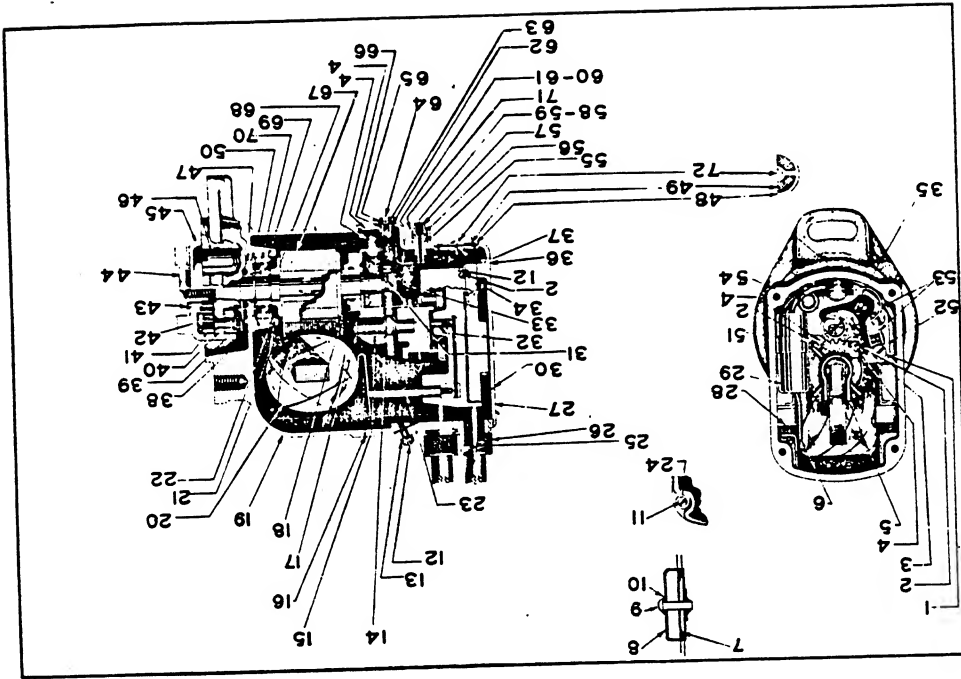


FIG.15 FAIRBANK-MORSE MAGNETO PARTS GROUP



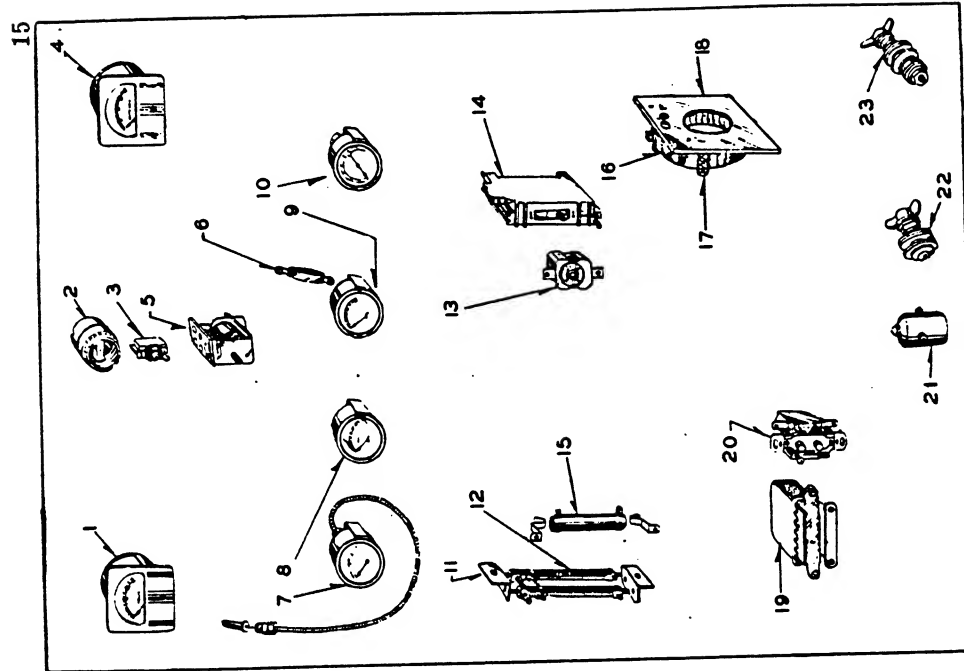


FIG.17 CONTROL GROUP

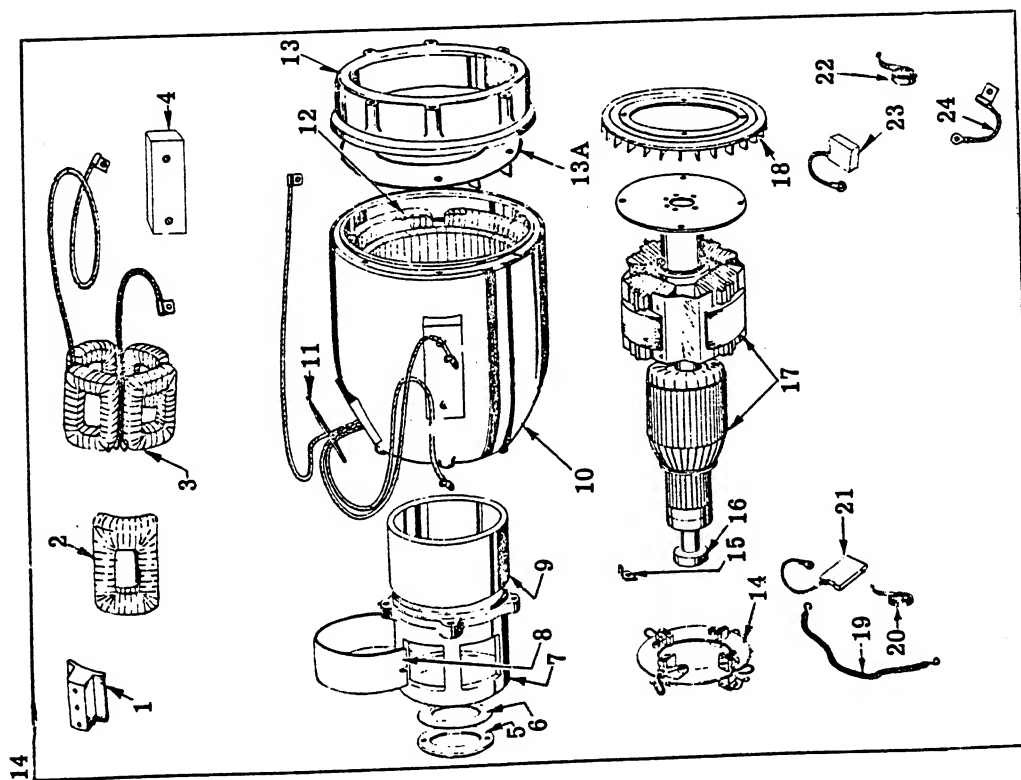


FIG.16 GENERATOR PARTS GROUP

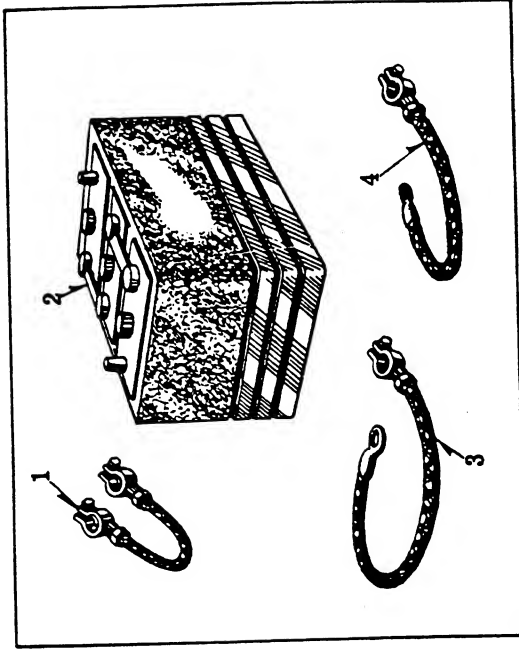


FIG.19 BATTERY GROUP

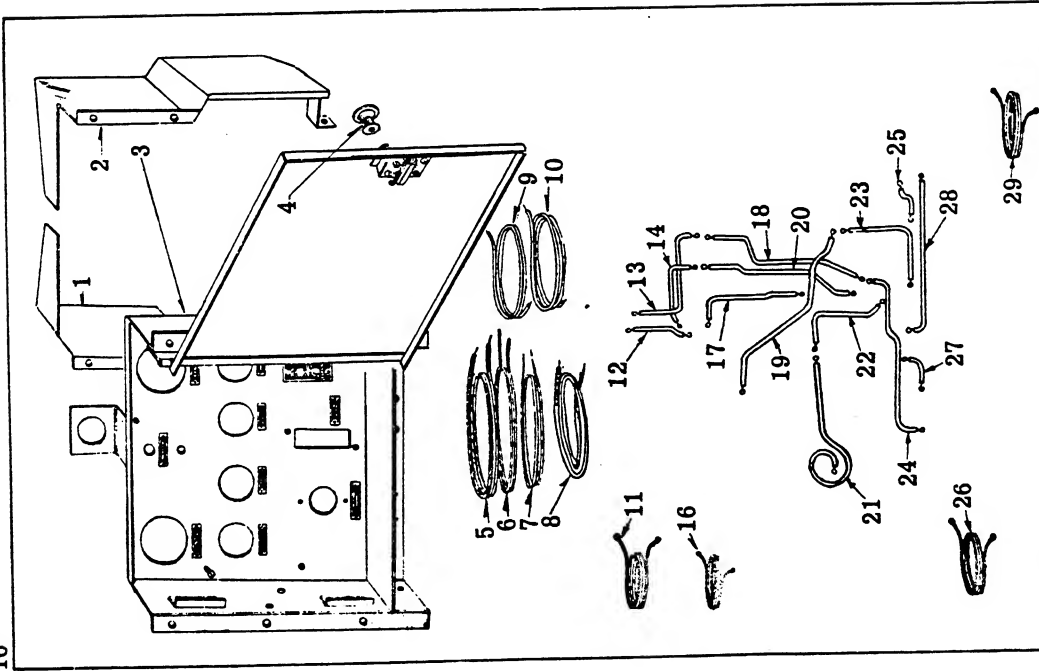
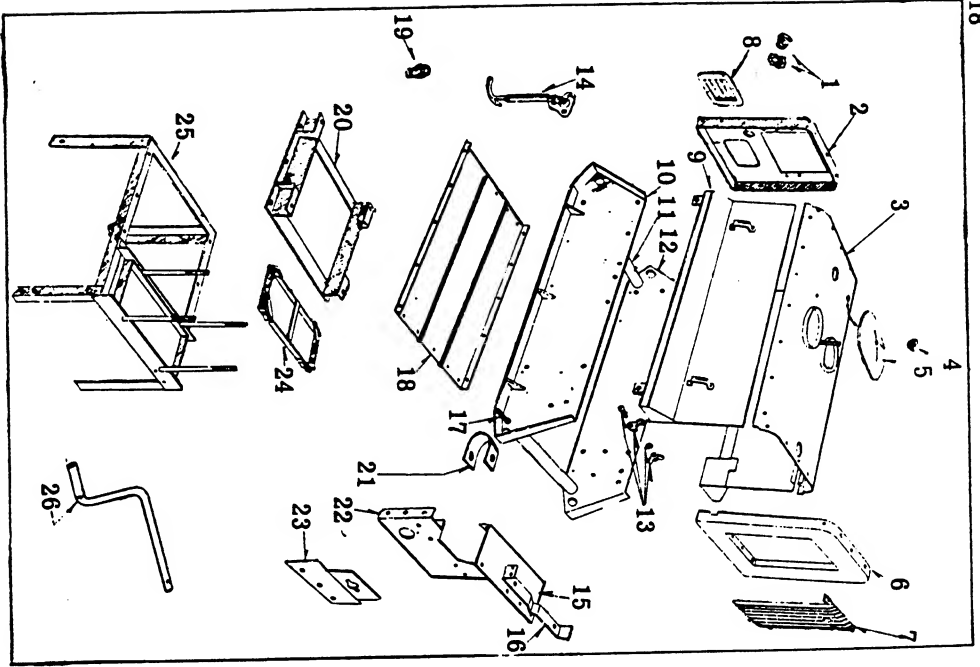


FIG.18 CONTROL PANEL AND WIRING GROUP

FIG.20 HOUSING PARTS GROUP



REF. PART NO.	DESCRIPTION	QUANTITY USED					
		A	B	C	D	E	F
FIG. 1 - CYLINDER, MANIFOLD, OIL PAN & OIL DRAIN GROUP							
1	(FM)351025-S7 Nut, Cylinder Head Stud - 7/16"-20 .....	18	18	18	18	18	18
2	(FM)18-6066 Stud, Cylinder Head - Short .....	14	18	18	18	18	18
2	(FM)8N-6065A Stud, Cylinder Head - Short .....	1	1	1	1	1	1
3	123A211 Indicator, Oil Level .....	1	1	1	1	1	1
3	(FM)9N-6750A Indicator, Oil Level .....	1	1	1	1	1	1
4	(FM)2NC-6754 Tube, Oil Level Indicator .....	1	1	1	1	1	1
5	123A20 Cap, Oil Filler .....	1	1	1	1	1	1
5	123B386 Cap, Oil Filler (Replaces Cap # (FM)EAF-6766 or (FM)8N-6766B.	4	1	1	1	1	1
6	(FM)48-6067 Stud, Cylinder Head - Long .....	1	1	1	1	1	1
7	110B509 Head, Cylinder .....	1	1	1	1	1	1
8	101A129 Cover, Starter Location Hole .....	1	1	1	1	1	1
9	(FM)99A-6055 Sleeve, Cylinder - .040" .....	4	4	4	4	4	4
9	(FM)8N-6055B Sleeve, Cylinder .....	2	2	2	2	2	2
10	154A313 Gasket, Intake and Exhaust Manifold .....	4	4	4	4	4	4
11	(FM)88403-S Stud, Manifold to Block .....	4	4	4	4	4	4
12	850-55 Washer, Manifold Stud Lock .....	4	4	4	4	4	4
13	871-38 Nut, Manifold Stud .....	4	4	4	4	4	4
13	110-67 Nut, Manifold Stud .....	1	1	1	1	1	1
14	(FM)74120-S Plug, Cylinder Block Rear Expansion .....	1	1	1	1	1	1
15	123P95 Pipe, Oil Filler .....	1	1	1	1	1	1
15	123B216 Pipe, Oil Filler .....	1	1	1	1	1	1
	(FM)8N-6763B Pipe, Oil Filler .....	1	1	1	1	1	1
16	110A548 Gasket, Cylinder Head .....	1	1	1	1	1	1
17	110A819 Block, Cylinder .....	1	1	1	1	1	1
17	(FM)8NNN-6010E Block, Cylinder .....	1	1	1	1	1	1
17	(FM)8NNN-6011D Block, Cylinder .....	1	1	1	1	1	1
18	(FM)8N-6018 Gasket, Timing Gear Side Cover .....	1	1	1	1	1	1
19	(FM)9N-9425 Manifold, Intake and Exhaust .....	1	1	1	1	1	1
19	78797?? Manifold, Intake and Exhaust .....	1	1	1	1	1	1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.		DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 1 - CYLINDER, MANIFOLD, OIL PAN & OIL DRAIN GROUP (Cont.)								
19	154B107	Manifold, Intake and Exhaust .....		1	1			
20	(FM)88146-S	Stud, Valve Chamber Cover .....	2	2	2			
20	(FM)88511-S	Stud, Valve Chamber Cover .....						
21	850-45	Washer, Lock - (2) Valve Chamber Cover - (14) Engine Pan to Block Bolt .....				2	2	2
22	868-2	Nut, Valve Chamber .....	16	16	16	16	16	16
23	110-514	Cover, Valve Chamber .....	2	2	2	2	2	2
24	110A803	Gasket, Valve Chamber Cover .....	1	1	1	1	1	1
25	110C804	Gasket, Cylinder Front Cover .....	2	2	2	2	2	2
26	(FM)9N-6017	Cover, Timing Gear Side .....	1	1	1	1	1	1
27	103A53	Gasket, Governor to Timing Gear Side Cover .....	1	1	1	1	1	1
28	(FM)01A-6663	Plunger, Oil Relief Valve .....	1	1	1	1	1	1
29	(FM)01A-6654	Spring, Oil Relief Valve .....	1	1	1	1	1	1
29	(FM)9N-6654	Spring, Oil Relief Valve .....	1					
30	(FM)68-6666	Nut, Oil Relief Valve .....		1	1	1	1	1
31	(FM)52-12410	Gasket, Oil Relief Valve .....	1	1	1	1	1	1
31	(FM)1GA-6669	Gasket, Oil Relief Valve .....	1					
31	167-24	Gasket, Oil Relief Valve .....				1	1	1
32	800-50	Screw, Hex Head Cap - (5) Cylinder Front Cover - (3) Timing Gear Side Cover .....		1	1			
33	(FM)34807-S2	Washer, Lock - Timing Gear Cover Screw .....	8	8	8	8	8	8
34	(FM)9N-6043	Plug, Engine Block Oil Pipe .....	3	3	3	3	3	3
35	(FM)18-6397	Dowel, Valve Chamber Cover to Cylinder .....	1	1	1	1	1	1
36	(FM)0NY-6019	Cover, Cylinder Front .....	2	2	2	2	2	2
37	(FM)8N-6701	Packing, Crankshaft Rear .....	1	1	1	1	1	1
38	(FM)8N-6710	Gasket, Oil Pan - Left Hand .....	2	2	2	2	2	2
39	(FM)8N-6711	Gasket, Oil Pan - Right Hand .....	1	1	1	1	1	1
40	(FM)B-6700A	Packing, Crankshaft Front and Cylinder Front Cover .....	1	1	1	1	1	1
41	110B351	Cover, Valve Chamber (With Breather Outlet) .....	2	2	2	2	2	2
			1					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.		DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 1 - CYLINDER, MANIFOLD, OIL PAN & OIL DRAIN GROUP (Cont.)								
41	123A282	Cover, Valve Chamber (With Breather Outlet) .....		1	1	1	1	1
42	75783	Cover, Fuel Pump Hole .....	1	1	1	1	1	1
43	(FM)2NC-6675	Pan, Oil .....	1	1	1	1	1	1
44	800-26	Screw, Engine Pan to Cylinder Block Hex Head Cap .....	14	14	14	14	14	14
45	102A52	Gasket, Drain Plug .....	1	1	1			
45	(FM)8N-6734	Gasket, Drain Plug .....	1					
46	505-50	Elbow, Oil Drain Street .....				1	1	1
47	505-234	Nipple, Oil Drain Pipe .....	1	1	1	1	1	1
48	505-14	Coupling, Oil Drain .....	1	1	1	1	1	1
49	505-13	Plug, Oil Drain Pipe .....	1	1	1	1	1	1
50	502-5	Elbow, Oil Line Inverted Female (Brass) .....	1	1	1	1	1	1
51	502-3	Connector, Oil Line Inverted Male (Brass) .....	1	1	1	1	1	1
52	502-41	Elbow, Oil Line Restricted Inverted Male (Brass) .....	1	1	1	1	1	1
53	160A425	Tube, Oil Line Copper - 1/4" x 33" - Magneto Gearcase to Engine Block .....	1	1	1	1	1	1
54	501-9	Line, Oil Pressure Gauge to Engine Block Flexible Oil .....	1	1	1	1	1	1
55	502A64	Tee, Oil Line (Brass) .....	1	1	1	1	1	1
56	123A217	*Valve, Crankcase Breather .....	1	1	1	1	1	1
56	123-188	Valve, Crankcase Breather .....	1					
57	505-11	*Elbow, Breather Valve to Manifold Street (1/4") .....	1	1	1	1	1	1
58	123A484	*Tube, Breather .....	1	1	1	1	1	1
59	502-42	*Elbow, Breather Tube to Valve Brass Inverted Male .....	1	1	1	1	1	1
60	502-18	*Connector, Valve Cover Brass Inverted Male .....	1	1	1	1	1	1
61	309-11	†Thermostat .....	1	1	1	1	1	1
62	309-1	▲Switch, High Water Temperature Cut-off .....	1	1	1	1	1	1
62	309B9	Switch, High Water Temperature Cut-off .....	1					
62	309B9FT	Switch, High Water Temperature Cut-off .....		1	1	1		
63	336A11	§Wire, High Water Temperature Switch to Magneto - 27-1/2" Long (Shielded) .....	1				1	1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED					
		A	B	C	D	E	F
FIG. 1 - CYLINDER, MANIFOLD, OIL PAN & OIL DRAIN GROUP (Cont.)							
63	336A904	1					
	Wire, High Water Temperature Cut-off Switch to Stop Button - 62" Long (Shielded) .....						
63	336A903		1	1	1	1	1
	Wire, High Water Temperature Cut-off to Magneto - 72" Long (Shielded) .....		1	1	1	1	1
	110A347		1	1	1	1	1
	110A348		2	2	2	2	2
	406A45	4	4	4	4	4	4
(FM)40-6057A	Insert, Valve Seat - Intake .....	4	4	4	4	4	4
(FM)52-6057E	Insert, Valve Seat - Exhaust .....						
NOTE: SYMBOLS BELOW TO BE USED ONLY IF SELECTION IS BEING MADE FROM COLUMN "A". ALL OTHER COLUMNS TO IGNORE ANY SYMBOL.							
* = Used Beginning with Engine Serial Number 192840.							
† = Used on units with the following Engine Serial Numbers: 163958 to 164085 inclusive, 175038 to 175800 inclusive, 187065 to 187760 inclusive, and 192840 or higher.							
▲ = Used on units with the following Engine Serial Numbers: 141950, 141952 to 142593 inclusive, 163107 to 164085 inclusive, 174116 to 174462 inclusive, 174663 to 175800 inclusive, 182684 to 183476 inclusive and 187065 to 187760 inclusive.							
§ = Use on units with the following Engine Serial Numbers: 141950, 141952 to 142593 inclusive, 163107 to 164085 inclusive, 174116 to 174462 inclusive, and 182684 to 183476 inclusive.							
¶ = Use on units with the following Engine Serial Numbers: 174663 to 175800 inclusive and 187065 to 187760 inclusive.							

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED					
		A	B	C	D	E	F
FIG. 2 - VALVE & CAMSHAFT GROUP							
1	40-6510C						
	Bushing, Valve Guide (2 Pieces) Sold in pairs only .....	8					
1	(FM)8BA-6510B		8	8	8	8	8
	Bushing, Valve Guide (2 Pieces) Sold in pairs only .....						
2	(FM)2NCS-6505	4	4	4	4		
	Valve, Exhaust (See also Valve Kit ⊗ ) .....					4	4
2	(FM)8NNN-6505A		4	4	4		
	Valve, Exhaust - Stellite (See also Valve Kit ⊗ ) .....						
3	(FM)11T-6505A					4	4
	Valve, Intake .....						
3	(FM)8BA-6505		8	8	8	8	8
	Valve, Intake .....						
4	(FM)40-6512		8	8	8		
	Retainer, Valve Guide Bushing .....					4	4
5	(FM)40-6514B		8	8	8		
	Retainer, Valve Spring (See also note below) .....						
5	(FM)8BA-6514		8	8	8		
	Retainer, Valve Spring (Intake Only) See also note below .....					4	4
6	(FM)2NC-6513		8	8	8		
	Spring, Valve .....					8	8
6	(FM)8N-6513		1	1	1	1	1
	Spring, Valve .....						
7	(FM)91A-6266		8	8	8		
	Plug, Expansion (2") Rear Camshaft Hole .....					8	8
8	(FM)8BA-6500A		8	8	8		
	Rod, Push - Valve (Tappet) See also note below .....						
8	(FM)8N-6500		1	1	1	1	1
	Rod, Push - Valve (Tappet) .....						
9	(FM)2NC-6250B		1	1	1	1	1
	Camshaft .....						
10	(FM)7RA-6256A		1	1	1	1	1
	Gear, Camshaft .....						
11	(FM)350400S		4	4	4	4	4
	Bolt, Camshaft Gear .....						
12	(FM)91A-6258		1	1	1	1	1
	Ring, Camshaft Gear Locking .....						
	(FM)8RT-6514					4	4
	Retainer, Valve Spring (Exhaust) .....						
	(FM)EAM-6518A					8	8
	Key, Valve Spring Retainer (Exhaust) .....					4	4
	(FM)8EQ-6550B						
	Cap, Valve Stem (Exhaust) .....						
	(FM)8N-6546B ⊗ Valve Kit, Rotocap - Complete (For conversion only) For Longer Valve Life (See also note below) .....						
NOTE: - On units which have been converted to the roto-type valve use these parts in place of those in the list above. (For complete conversion use Kit # (FM)8N-6546B).							
(FM)8N-6500	Rod, Push (Tappet Assembly) 8 used						

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.		DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 2 - VALVE & CAMSHAFT GROUP (Cont.)								
	(FM)8N-6505C	Valve, Exhaust (4 used)						
	(FM)8RT-6514B	Retainer, Valve Spring (Exhaust) 4 Used						
	(FM)EAM-6518A	Key, Valve Spring Retainer (Exhaust) 8 Used						
	(FM)8EQ-6550B	Cap, Valve Stem (Exhaust) 4 Used						
	(FM)8RA-6510P	Guide, Valve (8 Used)						
	(FM)8N-17045A	Wrench - Right Hand (1 Used)						
	(FM)8N-17046A	Wrench - Left Hand (1 Used)						
FIG. 3 - FLYWHEEL, CRANKSHAFT & PISTON GROUP								
1	(FM)350645-S	Bolt, Flywheel Hex Head .....	4	4	4	4	4	4
2	(FM)9N-6384	Gear, Flywheel Ring .....	1					
3	(FM)9N-6375	Flywheel and Ring Gear Assembly .....	1	1	1	1	1	1
3	(FM)8N-6375	Flywheel and Ring Gear Assembly .....	1	1	1	1	1	1
4	(FM)91A-6335	Seal, Crankshaft Rear Bearing Oil .....	8	8	8	8	8	8
5	(FM)9N-6333E	Liner, Main Bearing - Front and Rear (.010 U.S.) .....	4					
6	(FM)99A-6135A	Pin, Piston - Standard .....		4	4	4	4	4
6	(FM)19A-6135A	Pin, Piston - Standard .....	8	8	8	8	8	8
7	(FM)78-6140	Retainer, Piston Pin .....	8					
8	(FM)1GA-6212	Nut, Connecting Rod .....		8	8	8	8	8
8	(FM)7HA-6212	Nut, Connecting Rod .....	4	4	4	4	4	4
9	(FM)8N-6108B	Piston, Standard - W/Pin & Retainers .....	8	8	8			
10	(FM)99A-6150A	Ring, Piston Compression .....	4	4	4			
11	(FM)99A-6153A	Ring, Piston Oil Control .....						
	(FM)1NCS-6149A	Ring Set, Piston (For 4 Pistons) Special - for use in worn cylinders when diameter of worn cylinder does not exceed .010" over standard bore and it is not desirable to install new cylinder sleeves (Not Illustrated) .....	1	1	1			
			FIGURE MODEL AND SERIAL NUMBER OF UNIT!					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.		DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 3 - FLYWHEEL, CRANKSHAFT & PISTON GROUP (Cont.)								
	(FM)8N-6149A5	Ring Set, Piston (For 4 Pistons) Special -for use in worn cylinders when diameter of worn cylinder does not exceed .010" over standard bore and it is not desirable to install new cylinder sleeves (Not Illustrated) .....	4	4	4	1	1	1
12	(FM)9N-6200B	Rod Assembly, Connecting .....	8	8	8	8	8	8
13	(FM)9N-6211G	Liner, Connecting Rod Bearing (.020" U.S.) .....	1					
14	(FM)9N-6346	Stud, Main Bearing Cap - Long .....		1	1	1	1	1
14	(FM)8N-6346A	Stud, Main Bearing Cap - Long .....	1	1	1	1	1	1
15	(FM)48-6306A	Gear, Crankshaft (22 teeth) .....	1	1	1			
16	(FM)40-6310A	Slinger, Crankshaft Oil .....				1	1	1
16	(FM)40-6310A2	Slinger, Crankshaft Oil .....	5					
17	(FM)9N-6345	Stud, Main Bearing Cap - Short .....		5	5	5	5	5
17	(FM)8N-6345A	Stud, Main Bearing Cap - Short .....	1	1	1	1	1	1
18	(FM)9N-6325	Cap, Crankshaft Bearing - Rear .....	6	6	6			
19	(FM)B-6348	Nut, Main Bearing Stud Castle .....	1	1	1	1	1	1
20	(FM)9N-6303A	Crankshaft .....	1	1	1	1	1	1
21	(FM)9N-6330	Cap, Crankshaft Bearing - Center .....	2	2	2	2	2	2
22	(FM)9N-6331E	Liner, Main Bearing - Center (.010" U.S.) .....	8	8	8			
23	516-69	Pin, Cotter - Connecting Rod .....	1	1	1			
24	(FM)74156-S	Key, Crankshaft Gear Woodruff .....				1	1	1
24	(FM)74175-S	Key, Crankshaft Gear Woodruff .....	1	1	1	1	1	1
25	(FM)2N-6312	Pulley, Crankshaft .....	1					
26	(FM)2N-6319A	Ratchet, Crankshaft (Nut) .....		1	1	1	1	1
26	(FM)2N-6319A1	Ratchet, Crankshaft (Nut) .....	8	8	8			
	(FM)351393-S	Lockwasher, Connecting Rod Bolt (Not Illustrated) .....				4	4	4
	(FM)21A-6207B3	Bushing, Connecting Rod (Not Illustrated) .....				8	8	8
	(FM)45218-S	Nut, Connecting Rod Lock .....				1	1	1
	(FM)7RA-7609	Retainer, Flywheel .....	2	2	2			
	(FM)B-6387A	Dowel, Flywheel to Crankshaft .....				2	2	2
	(FM)1CM-6387A	Dowel, Flywheel to Crankshaft .....						
ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!								

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.			DESCRIPTION	QUANTITY USED					
				A	B	C	D	E	F
FIG. 4 - OIL PUMP GROUP									
1	121A1	Gasket, Oil Pump Cover .....	1	1	1	1	1	1	
2	(FM)52-6614B	Gear, Oil Pump Driving .....	1						
2	(FM)8N-6614	Gear, Oil Pump Driving .....		1	1	1	1	1	1
3	(FM)9N-6603	Body, Oil Pump .....	1						
3	(FM)8N-6603	Body, Oil Pump .....		1	1	1	1	1	1
4	(FM)9N-6615	Cover, Oil Pump - W/Tube and Screen Cover .....	1						
4	(FM)8N-6615	Cover, Oil Pump - W/Tube and Screen Cover .....		1	1	1	1	1	1
5	101A126	Cap. Oil Drain - Complete (W/2-5/8" - 20 Fine Thread) .....	x	1	1	1	1	1	1
5	101A53	Cap. Oil Drain - Complete (W/2-5/8" - 12 Coarse Thread) .....	x						
6	(FM)52-6610B	Gear, Oil Pump Driven .....	1						
6	(FM)8N-6610	Gear, Oil Pump Driven .....		1	1	1	1	1	1
7	(FM)9N-6612A	Bushing, Oil Pump Body .....	1						
7	(FM)9N-6612B	Bushing, Oil Pump Body .....		1	1	1	1	1	1
8	(FM)9N-6608A	Gear, Oil Pump - Drive and Shaft Assembly .....	1						
8	(FM)8N-6608	Gear, Oil Pump - Drive and Shaft Assembly .....		1	1	1	1	1	1
	505-13	Plug, Oil Drain Pipe .....	1	1	1	1	1	1	1
FIG. 5 - WATER PUMP, FAN & IDLER ASSEMBLY GROUP									
	(FM)8N-8501	Pump Assembly, Water (Not Illustrated) .....	1	1	1	1	1	1	
1	130C325	Fan, Engine Cooling .....	1	1	1	1	1	1	
2	(FM)9N-8606	Pulley, Fan and Water Pump .....	1						
2	(FM)2N-8610	Pulley, Fan and Water Pump .....		1	1	1	1	1	1
3	511-12	Belt, Fan .....	1	1	1	1	1	1	
4	(FM)OBA-7576	Ring, Water Pump Housing Snap .....	1						
4	(FM)7HA-8576	Ring, Water Pump Housing Snap .....		1	1	1	1	1	1
5	(FM)79-8530	Shaft, Water Pump and Bearing Assembly .....	1						

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.			DESCRIPTION	QUANTITY USED					
				A	B	C	D	E	F
FIG. 5 - WATER PUMP, FAN & IDLER ASSEMBLY GROUP (Cont.)									
5	(FM)2N-8578	Shaft, Water Pump and Bearing Assembly .....	1	1	1	1	1	1	
6	(FM)2N-8505	Housing, Water Pump (Body) .....	1	1	1	1	1	1	
7	131P100	Ring, Water Pump Seal Snap .....	1						
8	131P102	Washer, Water Pump .....	1						
9	131P103	Guide, Water Pump Spring .....	1	1	1	1	1	1	
10	132A54	Gasket, Water Pump Cover .....	1						
11	130A365	*Stud, Idler Pulley Tightener .....	1						
12	130A366	*Stud, Idler Pulley Arm and Nut .....	1						
13	505-53	Plug, Slotted Iron Pipe .....	1	1	1	1	1	1	
	130C318	Pulley Assembly, Idler (Includes Pulley, Bracket & Hardware)...	1	1	1	1	1	1	
15	130A321	Stud, Idler Pulley .....	1	1	1	1	1	1	
16	510A35	Bearing .....	1	1	1	1	1	1	
17	130A323	Ring, Idler Pulley Lock .....	1	1	1	1	1	1	
18	516-55	Pin, Idler Stud Groove .....	1						
19		*Arm, Idler Pulley (Use Pulley Assembly #130C318) .....	1						
20		*Bracket, Idler Pulley (Use Pulley Assembly #130C318) .....	1						
21	131P101	Seal, Water Pump - Impeller End .....		1	1	1	1	1	
21	(FM)2N-8564	Seal, Water Pump - Impeller End .....	1						
22	131P104	Ring, Water Pump Seal Clamp .....	3	3	3	3	3	3	
23	868-2	Nut, Body Assembly Hex .....	1						
24	(FM)68-8551A	Spring, Impeller End .....	4	4	4	4	4	4	
25	850-45	Lockwasher, Body Assembly .....	1						
26	3225	Impeller .....		1	1	1	1	1	
26	(FM)2N-8516	Impeller .....	3	3	3	3	3	3	
27	(FM)88371-S	Stud, Pump to Cylinder Block .....	1						
28	(FM)9N-8508	Cover, Water Pump .....		1	1	1	1	1	
28	(FM)8N-8508	Cover, Water Pump .....	1	1	1	1	1	1	
29	132A53	Gasket, Water Pump Rear (To Cylinder Block) .....	1	1	1	1	1	1	
30	800-25	Screw, Body Assembly Hex Head .....							

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. NO.	PART NO.	DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 5 - WATER PUMP, FAN & IDLER ASSEMBLY GROUP (Cont.)								
31	130B322	†Arm, Idler Pulley .....	1	1	1	1	1	1
32	130C317	†Bracket, Idler Pulley .....	1	1	1	1	1	1
33	130A320	†Pulley, Fan Idler .....	1	1	1	1	1	1
	130A94	†Screw, Belt Tension Adjusting .....	1	1	1	1	1	1
* = Use only on units with the following Engine Serial Numbers: - 69617 to 69823 inclusive, 85534 to 85537 inclusive, 141801 to 142254 inclusive, 142256 to 142396 inclusive, 142398 to 142593 inclusive, 163107 and 163108.								
† = Use on units with the following Engine Serial Numbers: - 142255, 142397, 163109 to 164085 inclusive, 174116 to 175800 inclusive, 182684 to 183476 inclusive, and 187065 to 187760 inclusive AND ALSO ON ALL REPLACEMENT ENGINES.								
FIG. 6 - RADIATOR GROUP								
1	130C324	Guard, Fan .....	1	1	1	1	1	1
2	130C319	Shroud, Fan .....	1	1	1	1	1	1
3	503A2	Hose, Radiator Inlet .....	1	1	1	1	1	1
4	130P328	Radiator (Tank & Core Assembly) .....	1	1	1	1	1	1
5	130A337	Cap Assembly, Radiator .....	4	4	4	4	4	4
6	503P4	Clamp, Radiator Hose (Includes Bolt & Nut) .....	1	1	1	1	1	1
7	503A1	Hose, Radiator Outlet .....	1	1	1	1	1	1
8	505-71	Nipple, Radiator Drain .....	1	1	1	1	1	1
9	505-27	Coupling, Radiator Drain .....	1	1	1	1	1	1
10	504-3	Cock, Radiator Drain .....	1	1	1	1	1	1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. NO.	PART NO.	DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 7 - GOVERNOR & THROTTLE CONTROL ROD GROUP								
1	150A69	Joint, Ball - (1) Throttle Control Rod to Governor Arm, (1)Throttle Control Rod to Carburetor .....	2	2	2	2	2	2
		Governor Assembly .....	1	1	1	1	1	1
2	151C32	Rod, Throttle Control .....	1	1	1	1	1	1
3	520A198	Rod Assembly, Throttle Control (Includes Rod, Ball Joints & Hardware) .....	1	1	1	1	1	1
4	150A226							
FIG. 8 - GOVERNOR PARTS GROUP								
1	(PG)X-454	Plug, Governor Spider Shaft Welch .....	1	1	1	1	1	1
2	(PG)G-3168	Bushing, Oilite .....	1	1	1	1	1	1
3	(PG)G-5113	Screw, Bumper .....	1	1	1	1	1	1
4	(PG)X-217	Nut, Bumper Screw and Screw Eye Hex .....	3	3	3	3	3	3
5	(PG)X-607	Plug, Rocker Shaft Welch .....	1	1	1	1	1	1
6	(PG)X-935	Pin, Spider to Shaft Groove .....	1	1	1	1	1	1
7	(PG)X-317	Bearing, Thrust .....	1	1	1	1	1	1
8	(PG)G-7121	Shaft, Governor .....	1	1	1	1	1	1
9	(PG)A-1837	Spider Assembly .....	1	1	1	1	1	1
10	510A34	Bearing .....	1	1	1	1	1	1
11	(PG)G-7118	Diaphragm, Governor Bearing .....	1	1	1	1	1	1
12	151-108	Gear, Governor .....	1	1	1	1	1	1
13	(PG)SN-266	Spring, Bumper .....	1	1	1	1	1	1
14	(PG)G-7117	Body, Governor .....	1	1	1	1	1	1
15	(PG)X-380	Bearing, Rocker Shaft Needle .....	2	2	2	2	2	2
16	(PG)G-7490	Ring, Rocker Shaft Snap .....	2	2	2	2	2	2
17	(PG)G-7120	Shaft, Governor Rocker .....	1	1	1	1	1	1
18	(PG)X-425	Pin, Adjusting Lever Stud Cutter .....	1	1	1	1	1	1
TOTAL PARTS REQUIRED TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!								

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!



REF. PART NO. NO.		DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 8 - GOVERNOR PARTS GROUP (Cont.)								
		Lockwasher, Yoke to Shaft .....	2	2	2	2	2	2
19	(PG)X-540	Screw, Yoke to Shaft Hex Head .....	2	2	2	2	2	2
20	(PG)X-723	Yoke .....	1	1	1	1	1	1
21	(PG)G-6026	Sleeve .....	1	1	1	1	1	1
22	(PG)G-7579	Weight, Governor .....	2	2	2	2	2	2
23	(PG)G-6653	Pin, Weight .....	2	2	2	2	2	2
24	(PG)G-5950	Pin, Bearing Diaphragm Locating Groove .....	1	1	1	1	1	1
25	(PG)X-1004	Pin, Gear to Shaft Groove .....	1	1	1	1	1	1
26	(PG)X-934	Lever, Governor .....	1	1	1	1	1	1
27	(PG)G-7119	Pin, Lever to Shaft Taper .....	1	1	1	1	1	1
28	(PG)X-82	Washer, Bearing to Cap Shakeproof .....	1	1	1	1	1	1
29	(PG)X-596	Screw, Bearing to Cap Round Head Machine .....	1	1	1	1	1	1
30	(PG)X-198	Nut, Adjusting Lever Screw Hex .....	1	1	1	1	1	1
31	860-12	Screw, Adjusting Lever Hex Head Cap .....	1	1	1	1	1	1
32	(PG)X-911	Seal, Rocker Shaft Oil .....	1	1	1	1	1	1
33	(PG)X-695	Eye, Adjusting Screw .....	1	1	1	1	1	1
34	(PG)G-3947	Spring, Governor .....	1	1	1	1	1	1
35	151A137	Lever, Adjusting .....	1	1	1	1	1	1
36	(PG)G-5715							

FIG. 9 - FUEL SUPPLY GROUP

1	159B457	Rod, Fuel Tank Hold Down .....	2	2	2	2	2
2	159A439	*Washer, Fuel Tank Neck - Neoprene .....	1	1	1	1	1
2	159A441	†Washer, Fuel Tank Neck - Neoprene .....	1	1	1	1	1
3	159A448	*Cap, Fuel Tank - W/Chain .....	1	1	1	1	1
3	159B20	†Cap, Fuel Tank - W/Chain .....	1	1	1	1	1
4	193-15	Float Assembly, Fuel Gauge .....	1	1	1	1	1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.		DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 9 - FUEL SUPPLY GROUP (Cont.)								
		Clip, Choke Bracket .....	1	1		1	1	1
		Rod, Manual Choke Control .....	1	1	1	1	1	1
5	153A69	Tank, Fuel (15 Gallon) .....	1	1	1	1	1	1
6	153P190	Nipple .....	1	1	1	1	1	1
7	159D456	Carburetor Assembly .....	1	1	1	1	1	1
8	502-46	Bracket, Choke Cable .....	1					
9	142C108	Gasket, Carburetor Flange .....		1	1	2	2	2
10	75853	Gasket, Carburetor Flange - 2 Used W/Spacer .....	1	1	1	1	1	1
11	(FM)9N-9447	Screen, Fuel Filter Bowl .....	1	1	1	1	1	1
11	154A49	Filter Assembly, Fuel .....	1	1	1	1	1	1
12	149P465	Gasket, Fuel Filter Bowl .....	1	1	1	1	1	1
13	149A12	Bowl, Fuel Filter .....	1	1	1	1	1	1
14	149-157	Line, Flexible Fuel .....	1	1	1	1	1	1
15	149A326	Elbow, Street (90°) .....	1	1	1	1	1	1
16	501-8	Elbow, Inverted Male .....						
17	502-20	Spacer, Carburetor .....				2	2	2
18	502-2	Stud, Carburetor to Manifold .....				2	2	2
	145-66	Nut, Carburetor to Manifold Stud .....						
	520-223							
	110-445							

\* - Use only on Units with the following Engine Serial Numbers:- 69617 to 69823 inclusive, 85534 to 85537 inclusive, 141801 to 142254 inclusive, 142256 to 142396 inclusive, 142398 to 142593 inclusive, 163107 and 163108.

† - Use on units with the following Engine Serial Numbers: 142255, 142397, 163109 to 164085 inclusive, 174116 to 174462 inclusive, 174663 to 175800 inclusive, 182684 to 183476 inclusive and 187065 to 187760 inclusive AND ALSO ON ALL REPLACEMENT ENGINES.

\* = Use only on Units with the following Engine Serial Numbers:- 69617 to 69823 inclusive, 85534 to 85537 inclusive, 141801 to 142254 inclusive, 142256 to 142396 inclusive, 142398 to 142593 inclusive, 163107 and 163108.

† = Use on units with the following Engine Serial Numbers: 142255, 142397, 163109 to 164085 inclusive, 174116 to 174462 inclusive, 174663 to 175800 inclusive, 182684 to 183476 inclusive and 187065 to 187760 inclusive AND ALSO ON ALL REPLACEMENT ENGINES.

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.		DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 10 - CARBURETOR PARTS GROUP								
1	(FM)9N-9447	Gasket, Carburetor Flange .....	1					
1	154A49	Gasket, Carburetor Flange - 2 Used W/Spacer .....		1	1	2	2	2
2	142-116	Needle, Main Adjusting .....	1	1	1	1	1	1
3	142-85	Needle, Idle Adjusting .....	1	1	1	1	1	1
4	142-67	Screw, Throttle Body to Bowl .....	4	4	4	4	4	4
5	142-76	Spring, Idle Needle .....	1	1	1	1	1	1
6	142-98	Lockwasher, Body to Bowl .....	4	4	4	4	4	4
7	142-77	Spring, Main Adjusting Needle .....	1	1	1	1	1	1
8	142-99	Washer, Main Adjusting Needle Steel .....	1	1	1	1	1	1
9	142-71	Gasket, Main Adjusting Needle .....	1	1	1	1	1	1
10		Body Assembly, Throttle (Not Sold Separately - Order New Carburetor) .....	1	1	1	1	1	1
10A	142-120	Pin, Throttle Stop .....	1	1	1	1	1	1
11	142-62	Screw, Throttle Fly .....	2	2	2	2	2	2
12	142-65	Screw, Idle Drilling Inspection Plug .....	1	1	1	1	1	1
13	142-100	Lockwasher, Throttle Fly .....	2	2	2	2	2	2
14	142-60	Fly, Throttle .....	1	1	1	1	1	1
15	(FM)9N-9536	Spring, Main Adjusting Ratchet .....	1	1	1	1	1	1
16	142-100	Lockwasher, Ratchet Spring .....	2	2	2	2	2	2
17	142-62	Screw, Ratchet Spring .....	2	2	2	2	2	2
18	24200	Bracket, Float .....	1	1	1	1	1	1
19	24159	Screw, Float Bracket Drive .....	2	2	2	2	2	2
20	142-59	Shaft Assembly, Lever and Throttle .....	1	1	1	1	1	1
21	142-69	Gasket, Throttle Body to Bowl .....	1	1	1	1	1	1
22	148A17	Gasket, Float Valve Seat .....	1	1	1	1	1	1
23	142-75	Spring, Throttle Stop .....	1	1	1	1	1	1
24	142-92	Jet, Economizer .....	1	1	1	1	1	1
25	142-119	Jet, Idle .....	1	1	1	1	1	1
26	142-106	Valve, Float Seat and Gasket Assembly (Matched) .....	1	1	1	1	1	1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED					
		A	B	C	D	E	F
FIG. 10 - CARBURETOR PARTS GROUP (Cont.)							
27	142-84	Shaft, Float Lever .....	1	1	1	1	1
28	142-117	Venturi, Throat .....	1	1	1	1	1
29	142-83	Float and Lever Assembly .....	1	1	1	1	1
30	142-90	Nozzle .....	1	1	1	1	1
31	142-70	Gasket, Main Nozzle .....	1	1	1	1	1
32	142-118	Jet, Maximum Fuel Limiting .....	1	1	1	1	1
33		Bowl Assembly (Not Sold Separately - Order New Carburetor) ...	1	1	1	1	1
34	142-61	Screw, Choke Fly .....	2	2	2	2	2
35	142-100	Lockwasher, Choke Fly .....	2	2	2	2	2
36	142-102	Strainer, Gasoline Drain Dust .....	1	1	1	1	1
37	142-104	Plug, Expansion (Retainer for Dust Strainer) .....	1	1	1	1	1
38	142-103	Plug, Bowl Drain .....	1	1	1	1	1
39	24173	Flapper, Choke Fly .....	1	1	1	1	1
40	142-340	Spring, Choke Fly Flapper .....	1	1	1	1	1
41	142-113	Swivel, Choke Lever .....	1	1	1	1	1
42	142-66	Screw, Choke Lever Swivel .....	1	1	1	1	1
43	24174	Fly, Choke .....	1	1	1	1	1
44	142-112	Fly Assembly, Choke .....	1	1	1	1	1
45	24205	Spring, Choke Return .....	1	1	1	1	1
46	142-115	Bracket, Choke .....	1	1	1	1	1
47	516-59	Key, Choke Lever Swivel .....	1	1	1	1	1
48	142-82	Bracket Assembly, Choke .....	1	1	1	1	1
49	142-114	Clip, Choke Bracket .....	1	1	1	1	1
50	142-125	Choke Lever and Shaft Assembly .....	1	1	1	1	1
51	142-97	Lockwasher .....	1	1	1	1	1
52	142-63	Screw, Choke Bracket .....	1	1	1	1	1
53	142-110	Gasket Kit, Carburetor .....	1	1	1	1	1
	142-58	Packing, Choke Shaft (Not Illustrated) .....	1	1	1	1	1
	142-96	Retainer, Choke Shaft Packing (Not Illustrated) .....	1	1	1	1	1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.			DESCRIPTION	QUANTITY USED					
				A	B	C	D	E	F
FIG. 11 - AIR CLEANER GROUP									
1	(FM)ONA-18205	Cleaner Assembly, Air (Used on units manufactured prior to Sept. 1, 1951) Use Cleaner #140C150 plus Bracket #140A255 ...	x						
		Cleaner Assembly, Air (Used begin W/Sept. 1, 1951) .....	1	1	1	1	1	1	1
1	140C150	Bracket, Air Cleaner (Replaces Bracket #140A153) .....	1	x	x				
2	140A255	Strap, Air Cleaner Adapter Tube - Use Bracket #140A255 .....	2	2	2	2	2	2	2
3	140A154	Clamp, Air Cleaner to Carburetor Hose .....	1	1	1	1	1	1	1
4	503-11	Tube, Air Cleaner Adapter (Replaces Tube #78078) .....	1						
5	140C148	Hose, Air Cleaner to Carburetor .....	1						
6	503-3	Hose, Air Cleaner to Carburetor .....		1	1	1	1	1	1
6	503-88	Hose, Air Cleaner to Carburetor .....							
FIG. 12 - MUFFLER GROUP									
		Clamp, Exhaust Muffler Inlet Pipe (Replaces Clamp (FM)9N-5251. ....	1	1	1	1	1	1	1
1	155A20	Clamp, Exhaust Muffler (Replaces Clamp #78096) .....	1	1	1	1	1	1	1
2	155B405	Elbow, Exhaust Adapter (Flanged) .....	1	1	1	1	1	1	1
3	155B121	Coupling, Exhaust Pipe .....	1	1	1	1	1	1	1
4	505-32	Nipple, Exhaust Pipe .....	1	1	1	1	1	1	1
5	75742	Elbow, Exhaust Pipe (90°) .....	1	1	1	1	1	1	1
6	505-43	Muffler, Exhaust .....	1	1	1	1	1	1	1
7	155B77								
FIG. 13 - IGNITION GROUP									
1	78340	*Wire, Ignition to No. 4 Plug (Shielded) .....	1	1			1	1	
2	78338	*Wire, Ignition to No. 3 Plug (Shielded) .....	1	1			1	1	

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

			QUANTITY USED					
REF. NO.	PART NO.	DESCRIPTION	A	B	C	D	E	F
FIG. 13 - IGNITION GROUP (Cont.)								
3	78339	*Wire, Ignition to No. 2 Plug (Shielded) .....	1	1			1	1
4	78341	*Wire, Ignition to No. 1 Plug (Shielded) .....	1	1			1	1
5	167C26	*Conduit, Ignition Wire .....	1	1			1	1
6	167A1256	*Wire Set, Ignition .....						1
6	167A1276	Wire Set, Ignition .....	4	4	4	4	4	4
7	167A2	Nut, Magneto Shield Outlet Nipple Knurled .....	1					
8	162B233	†Shield, Magneto .....	1					
9	162A226	†Magneto Assembly, Wico .....	1	1	1	1		
9A	161-97	§Magneto, Fairbanks Morse .....					1	1
9A	161A187	Magneto, Fairbanks Morse .....	1					
10	167A105	▲Cover, Spark Plug Shield Box .....	1					
11	76487	▲Box, Spark Plug Shield .....	4	4		4	4	4
12	167A67	*Shield, Spark Plug .....	1					
13	167A1257	▲Cable, Spark Plug - No. 3 - Shielded .....						1
13	167A1182	Cable, Spark Plug - No. 3 - Shielded .....	1					
14	167A1258	▲Cable, Spark Plug - No. 2 - Shielded .....						1
14	167A1274	Cable, Spark Plug - No. 2 - Shielded .....	1					
15	167A1259	▲Cable, Spark Plug - No. 4 - Shielded .....						1
15	167A1275	Cable, Spark Plug - No. 4 - Shielded .....	1					
16	167A1260	▲Cable, Spark Plug - No. 1 - Shielded .....						1
16	167A1273	Cable, Spark Plug - No. 1 - Shielded .....	4	4				
17	167-4	Plug, Spark .....					4	4
17	167-28	Plug, Spark .....						4
17	167-81	Plug, Spark .....	4					
18	314-6	▲Suppressor, Spark Plug .....		4				
18	314-32	Suppressor, Spark Plug .....	1					
19	516-107	†Pin, Magneto Drive and Driven Gear Retaining .....	1					
20	160A181	†Shaft, Magneto Drive .....	2					
21	166A75	†Gear, Magneto Drive and Driven .....						

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. NO.	PART NO.	DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 13 - IGNITION GROUP (Cont.)								
22	160A424	Gasket, Magneto Gear Box .....	1	1	1	1	1	1
23	160B164	†Gearcase Assembly, Magneto (See Illustration) This gearcase used on units built prior to approximately 7/2/43 (Use this assembly plus clamp #160A186) .....	1					
24	160C179	†Gearcase Assembly, Magneto (See Illustration) This gearcase used on units built after approximately 7/2/43 .....	1					
25	161P191	§Gearcase Assembly, Magneto Drive .....	1	1	1	1	1	1
26	336A903	§Wire, Magneto to Cut-off Switch .....	1	1	1	1	1	1
27	103A52	†Gasket, Magneto Gearcase Cover .....	1					
28	160A180	†Cover, Magneto Gearcase .....	1					
29	520A185	†Stud, Magneto Thrust Slotted .....	4	4		4	4	4
30	167-9	Gasket, Spark Plug .....	4	4		4	4	4
31	167A42	Adapter, Spark Plug .....						
32	160A186	†Clamp, Magneto Locking (Used on units built after approximately 7/2/43) .....	1			4	4	4
	167-19	Grommet, Spark Plug Wires - Rubber (Not Illustrated) .....						
NOTES: SYMBOLS BELOW TO BE USED ONLY IF SELECTION IS BEING MADE FROM COLUMN "A". ALL OTHER COLUMNS TO IGNORE ANY SYMBOL.								
* = Used only on units with the following Engine Serial Numbers: - 69617 to 69823 inclusive, 85534 to 85537 inclusive, 141801 to 142254 inclusive, 142256 to 142396 inclusive, 142398 to 142593 inclusive, 163107 and 163108.								
† = Used only on units with the following Engine Serial Numbers: - 69617 to 69823 inclusive, 85534 to 85537 inclusive, 141801 to 142593 inclusive, 163107 to 164085 inclusive, 174116 to 174462 inclusive, and 182684 to 183476 inclusive.								

NOTES: SYMBOLS BELOW TO BE USED ONLY IF SELECTION IS BEING MADE FROM COLUMN "A". ALL OTHER COLUMNS TO IGNORE ANY SYMBOL.

\* = Used only on units with the following Engine Serial Numbers: - 69617 to 69823 inclusive, 85534 to 85537 inclusive, 141801 to 142254 inclusive, 142256 to 142396 inclusive, 142398 to 142593 inclusive, 163107 and 163108.

† = Used only on units with the following Engine Serial Numbers: - 69617 to 69823 inclusive, 85534 to 85537 inclusive, 141801 to 142593 inclusive, 163107 to 164085 inclusive, 174116 to 174462 inclusive, and 182684 to 183476 inclusive.

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED					
		A	B	C	D	E	F
FIG. 13 - IGNITION GROUP (Cont.)							
NOTES: (Cont.)							
§ = Used only on units with the following Engine Serial Numbers: - 174663 to 175800 inclusive, and 187065 to 187760 inclusive.							
▲ = Used only on units with the following Engine Serial Numbers: - 142255, 142397, 163109 to 164085 inclusive, 174116 to 174462 inclusive, 174663 to 175800 inclusive, 182684 to 183476 inclusive, and 187065 to 187760 inclusive.							
† = Used only on units with the following Engine Serial Numbers: - 69617 to 69823 inclusive, 85534 to 85537 inclusive, 141801 to 142254 inclusive, 142256 to 142396 inclusive, 142398 to 142593 inclusive, and 163107 to 163162 inclusive.							
FIG. 14 - WICO MAGNETO PARTS GROUP							
1	162-107	Cap, Distributor (New Style) Includes New Style Gasket (Replaces Old Style Cover) .....	1				
2	162-145	Gasket, Distributor Cap (Obsolete) Use #162-107 Cap and Gasket. ....	x				
2A	162-130	Gasket, Distributor Cap .....	1				
3	162-108	Arm, Distributor .....	1				
4	(WCE)3795	Felt, Breaker Cover Sealing (Obsolete- Not Required. No Longer Furnished) .....	x				
5	(WCE)3796	Cover, Breaker (Old Style) Obsolete (Use #162-107 Cap & Gasket) .....	x				
6	162-111	Plate, Cam Screw Lock .....	1				
7	162-115	Cam, Breaker .....	1				
8	162-125	Washer, Inner Core Spacing - Felt .....	2				
9	162-100	Key, Cam .....	1				
10	162-138	Core, Inner .....	1				

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED					
		A	B	C	D	E	F

FIG. 14 - WICO MAGNETO PARTS GROUP (Cont.)

11	162-106	Ring, Inner Core Snap.....	1				
12	162-116	Rotor .....	1				
13	162-110	Gasket, Bearing Plate Housing .....	1				
14	162-114	Plate, Bearing - W/Bearing .....	1				
15	162-109	Gasket, End Plate .....	1				
16	162-105	Pivot, Trip Arm .....	2				
17	162-119	Plate, Support .....	1				
18	162-129	Spring, Trip Arm .....	2				
19	162-135	Arm, Trip .....	2				
20	162-127	Spring, Impulse - Includes Guide .....	1				
21	162-23	Spacer, Breaker Arm .....	1				
22	162-136	Point Set, Breaker .....	1				
23	162-16	Gasket, Condenser Case .....	1				
24	162-18	Condenser .....	1				
25	162-120	Plate, Breaker .....	1				
26	162-118	Plate, Cam .....	1				
27	162-104	Pencil, Secondary .....	1				
28	(WCE)X-3975	Housing, Main .....	1				
29	162-121	Shaft, Drive .....	1				
30	162-66	Grommet, Rubber .....	2				
31	162-117	Wick, Oil .....	2				
32	162-8	Plug, Oil .....	2				
33	162-126	Shield, Coil - Fabric .....	2				
34	162-85	Wedge, Coil .....	1				
35	162-103	Coil .....	1				
36	336A10	Lead, Magneto to Stop Switch Ground .....	1				
37	162-122	Plate, End - Includes Impulse Stop Pins .....	2				
38	162-98	Washer, End Plate Screw - Clamp (Special) .....					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED					
		A	B	C	D	E	F

FIG. 15 - FAIRBANKS-MORSE MAGNETO PARTS GROUP

1	814-77	Screw, Bearing and Breaker Plate Flat Head .....	4	4	4	4	4
2	850-25	Washer, Lock (1) Condenser, (1) Stationary Bracket and (4) Distributor Block .....	6	6	6	6	6
3	526-3	Distributor Block .....	1	1	1	1	1
4	812-76	Washer, Stationary Contact Support .....	3	3	3	3	3
5	161-60	Screw, Round Head (1) Condenser Mounting, (1) Stationary Bracket and (1) Lead Wire Terminal .....	1	1	1	1	1
6	161-59	Rotor, Distributor .....	1	1	1	1	1
7	161-13	Tube, Primary Lead Wire .....	2	2	2	2	2
8	161-14	Gasket, Ventilator Hood .....	2	2	2	2	2
9	161-77	Hood, Ventilator .....	2	2	2	2	2
10	161-15	Rivet, Hooded Ventilator Screen .....	2	2	2	2	2
11	(FBM)10S10A	Gasket, Ventilator Hood Rivet .....	4	4	4	4	4
12	161-8	Screw, End Cap Fillester Head .....	7	7	7	7	7
13	161-126	Screw, Fillester Head (3) End Cap Cover and (4) Distributor Block .....	3	3	3	3	3
14	161-55	Washer, End Cap Cover Lock .....	2	2	2	2	2
15	161-73	Washer, Distributor Shaft Flat .....	1	1	1	1	1
16	161-42	Bearing, Distributor Sleeve .....	1	1	1	1	1
17	161-17	Gasket, End Cap to Frame Lead .....	1	1	1	1	1
18	161-72	Ring, Distributor Shaft Snap .....	1	1	1	1	1
19	161-21	Bearing, Rotor Shaft Sleeve .....	1	1	1	1	1
20	161-29	Frame - Integral Flange .....	1	1	1	1	1
21	161-18	Coil Assembly .....	1	1	1	1	1
22	161-41	Ring, Rotor Bearing Snap .....	2	2	2	2	2
23	161-10	Washer, Bearing Insulating .....	1	1	1	1	1
24	161-24	Rod, Distributor High Tension Lead .....	4	4	4	4	4
25	(FBM)B2473	Washer, End Cap Lock .....	4	4	4	4	4
26	167A2	Seal, Cable Socket Rubber .....	4	4	4	4	4
27	161-85	Nut, Cable Outlet .....	1	1	1	1	1
		Cover, End Cap .....					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED					
		A	B	C	D	E	F
FIG. 15 - FAIRBANKS-MORSE MAGNETO PARTS GROUP (Cont.)							
28	815-85	2	2	2	2	2	2
29	161P182	1	1	1	1	1	1
30	161-6	1	1	1	1	1	1
31	161-48	1	1	1	1	1	1
32	161-38	1	1	1	1	1	1
33	161-20	1	1	1	1	1	1
34	161-39	1	1	1	1	1	1
35	161-35	1	1	1	1	1	1
36	161-22	3	3	3	3	3	3
37	161-31	1	1	1	1	1	1
38	161-19	2	2	2	2	2	2
39	161-96	1	1	1	1	1	1
40	161-89	1	1	1	1	1	1
	161-90	1	1	1	1	1	1
41	161-51	1	1	1	1	1	1
42	161-129	1	1	1	1	1	1
43	161-94	1	1	1	1	1	1
44	161-92	1	1	1	1	1	1
45	161-95	1	1	1	1	1	1
46	161-91	1	1	1	1	1	1
47	161-62	4	4	4	4	4	4
48	161-80	3	3	3	3	3	3
49	161-81	1	1	1	1	1	1
	161-82	2	2	2	2	2	2
	161-83	1	1	1	1	1	1
50	161-34	1	1	1	1	1	1
51	161-70	1	1	1	1	1	1
52	161-140	1	1	1	1	1	1
53	161-86	1	1	1	1	1	1

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.		DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 15 - FAIRBANKS-MORSE MAGNETO PARTS GROUP (Cont.)								
54	161-74	Pinion, Rotor .....	1	1	1	1	1	1
55	161A12	Insulator, Ground Cable Terminal .....	1	1	1	1	1	1
56	161A79	Washer, Ground Terminal Insulating .....	1	1	1	1	1	1
57	161A11	Ferrule, Ground Cable .....	1	1	1	1	1	1
58	161A64	Terminal, Ground Cable .....	1	1	1	1	1	1
59	161-65	Terminal, Group .....	1	1	1	1	1	1
60	161-43	Strip, Ground Switch .....	1	1	1	1	1	1
61	161-44	Switch, Ground .....	1	1	1	1	1	1
	161-16	Guide, Ground Switch Strip (Not Illustrated) .....	1	1	1	1	1	1
62	161-37	Washer, Ground Screw Flat .....	1	1	1	1	1	1
63	812-63	Screw, Ground Terminal Round Head .....	1	1	1	1	1	1
64	161-46	Nut, Ground Terminal Screw .....	1	1	1	1	1	1
65	161-47	Washer, Ground Terminal Lock .....	1	1	1	1	1	1
66	161-36	Bushing, Primary Ground Insulating .....	1	1	1	1	1	1
67	161-88	Rotor, Magnetic .....	2	2	2	2	2	2
68	161-56	Shim, Thrust Bearing .....	1	1	1	1	1	1
69	161-61	Strip, Rotor Bearing Insulating .....	1	1	1	1	1	1
70	161P71	Bearing, Rotor Shaft Ball .....	1	1	1	1	1	1
71	161A58	Nut, Ground Cable Outlet .....	1	1	1	1	1	1
72	161-76	Rivet, Ventilator Screen .....						
FIG. 16 - GENERATOR PARTS GROUP								
1	221A4	Poleshoe, Exciter .....	4					
2	222B57	Coil, Exciter Field (Replaces Coil #75645B) .....	4					
3	222A1036	Coil Assembly, Exciter -Complete Set (Replaces Coil Assembly #75645) .....	1					
			PARTS LISTED ARE SUBJECT TO CHANGE WITHOUT NOTICE AND SERIAL NUMBER OF UNIT!					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.	DESCRIPTION	QUANTITY USED					
		A	B	C	D	E	F
FIG. 16 - GENERATOR PARTS GROUP (Cont.)							
4,	232A566 Shim, Generator Mounting (Has 2 holes drilled thru for mounting).	2					
	232A567 Shim, Generator Mounting (Has 1 hole drilled thru for mounting)	2					
	Not Illustrated .....	1					
5	232B55 Cover, Generator Bearing .....	1					
6	232A57 Gasket, Generator Bearing Cover .....	1					
7	211C11 Bell, Generator End .....	1					
8	232B122 Band, Exciter End Bell .....	1					
9	210C36 Frame, Exciter .....	1					
10	75526C Frame, Generator .....	1					
11	232B84 Plate, Generator Cover .....	1					
12	75589 Stator Assembly, Wound (Does not include Generator Frame) ....	1					
13	231D34 Adapter, Generator to Engine .....	1					
13A	75674 Baffle Ring .....	1					
14	212A192 Rig Assembly, Brush (Includes Brushes and Springs) .....	1					
15	232A58 Clip, Bearing Stop .....	1					
16	510A2 Bearing, Generator .....	1					
17	201A351 Rotor Assembly, Complete - W/Bearing (Replaces Assembly #75567) .....	1					
	Blower, Generator .....	1					
18	205C44 Wire, Collector Brush Jumper .....	1					
19	336A395 Spring, AC Brush .....	4					
20	212A1004 Brush, AC .....	4					
21	214A8 Spring, DC Brush .....	4					
22	212A1011 Brush, DC .....	4					
23	214A23 Wire, Ground Jumper Flexible .....	2					
24	336A116						

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO. NO.		DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 17 - CONTROL GROUP								
1	302-40	Voltmeter, AC (0-150 Volts) Shielded .....	1					
2	322A2	Socket, Panel Lamp .....	1					
3	308-2	Switch, Panel Lamp Toggle .....	1					
4	302-9	▲Ammeter, AC (0-75 Amps) Shielded .....	1					
4	302-10	†Ammeter, AC (0-80 Amps) Shielded .....	1					
5	306A124	Relay Assembly, Charge .....	1					
6	193-9	Resistor, Fuel Gauge .....	1					
7	193-8	Gauge, Water Temperature .....	1					
8	302-58	Ammeter, DC (10-0-10 Scale) .....	1					
9	193K1	Gauge, Fuel (Includes Gauge, Resistor, Gasket, Tank Unit Flange, Tank Unit Arm and Hardware) .....	1					
10	193-3	▲Gauge, Oil .....	1					
10	193-5	†Gauge, Oil .....	1					
11	304A4	Bracket, Charge Resistor Mounting .....	2					
12	304P53	Resistor, Charge (3/4" x 6") Adjustable .....	2					
13	323-109	Receptacle, Trouble Lamp .....	1					
14	320-23	▲Breaker, Overload Circuit .....	1					
14	320-50	†Breaker, Overload Circuit .....	1					
15	304P2	Resistor, Low Charge (3/4" x 4") Fixed .....	1					
16	302-76	▲Transformer, Ammeter Current .....	1					
16	302-77	†Transformer, Ammeter Current .....	1					
17	302A154	Bracket, Current Transformer Mounting .....	2					
18	302A87	Panel, Ammeter & Current Transformer Mounting .....	1					
19	305A1	Regulator, Voltage .....	1					
20	308A9	Switch, Start-Stop .....	1					
21	307B40	Switch, Start Solenoid .....	1					
22	332A477	Post Assembly, Terminal (Negative) .....	1					
23	332A476	Post Assembly, Terminal (Positive) .....	1					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. NO.	PART NO.	DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 17 - CONTROL GROUP (Cont.)								
▲ = Use only on units with the following Engine Serial Numbers: - 69617 to 69823 inclusive, 85534 to 85537 inclusive, 141801 to 142593 inclusive and 163107 to 164085 inclusive.								
† = Use only on units with the following Engine Serial Numbers: - 174116 to 174462 inclusive, 174663 to 175800 inclusive, 182684 to 183476 inclusive and 187065 to 187760 inclusive.								
FIG. 18 - CONTROL PANEL & WIRING GROUP								
1	301A980	Plate, Instrument Panel Guard - Right Hand .....	1					
2	78024	Plate, Instrument Panel Guard - Left Hand .....	1					
3	75777C	Panel, Instrument - W/Door .....	1					
4	406-2	Knob, Control Panel Door .....	1					
5	334-7	Wire, Remote Black (No. 14) 10 Feet Long .....	1					
6	334-8	Wire, Remote Black (No. 16) 10 Feet Long .....	1					
7	334-14	Wire, Rockbestos (No. 14) 10 Feet Long .....	1					
8	334-11	Wire, Rockbestos (No. 8) 10 Feet Long .....	1					
9	336A168	Wire, Motor (No. 6 Flexible) 10 Feet Long .....	1					
10	226A4	Wire, Starter Lead (No. 6 Flexible) 10 Feet Long .....	1					
11	76595	Wire, Black Remote (No. 12) 52" Long (DC Ammeter to Start Solenoid Switch) .....	1					
12	76143	Wire, Rockbestos (No. 14) 6" Long (Panel Light Switch to Panel Light) .....	1					
13	76582	Wire, Rockbestos (No. 14) 11" Long (Voltmeter to Panel Light)..	1					
14	76142	Wire, Rockbestos (No. 14) 6" Long (Voltmeter to Panel Light Switch) .....	1					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. NO.	PART NO.	DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 18 - CONTROL PANEL & WIRING GROUP (Cont.)								
16	76593	Wire, Black Remote (No. 16) 44" Long (Resistor to Start Solenoid Switch) .....	1					
17	336A908	Wire, Rockbestos (No. 14) 8-1/2" Long (Relay to DC Ammeter).	1					
18	76585	Wire, Rockbestos (No. 14) 12-3/4" Long (AC Voltmeter to Trouble Lamp) .....	1					
19	336A909	Wire, Rockbestos (No. 14) 15" Long (Charge Resistor to Fuel Gauge) .....	1					
20	76586	Wire, Rockbestos (No. 14) 11-3/4" Long (AC Voltmeter to Trouble Lamp) .....	1					
21	76592B	Wire, Rockbestos (No. 8) 20-1/2" Long (Current Transformer to Circuit Breaker) .....	1					
22	76141B	Wire, Rockbestos (No. 14) 10" Long (Trouble Lamp to Circuit Breaker) .....	1					
23	76588	Wire, Rockbestos (No. 14) 7" Long (Voltage Regulator to Low Charge Resistor) .....	1					
24	76591B	Wire, Rockbestos (No. 14) 13" Long (Load Terminal to Trouble Lamp) .....	1					
25	76596B	Wire, Rockbestos (No. 14) 10" Long (Resistor Connector) .....	1					
26	76598	Wire, Black Remote (No. 16) 24" Long (Fuel Tank to Fuel Gauge).	1					
27	76590B	Wire, Rockbestos (No. 8) 7" Long (Circuit Breaker to Load Terminal) .....	1					
28	76589B	Wire, Rockbestos (No. 14) 8-3/4" Long (Voltage Regulator to Charge Resistor) .....	1					
29	76602	Wire, Start-Stop Switch to Start Solenoid .....	1					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!



REF. NO.	PART NO.	DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 19 - BATTERY GROUP								
1	416A4	Cable, Battery Jumper .....	1					
2	416P254	Battery .....	2					
3	416A21	Cable, Battery Negative (20-1/2" Long) .....	1					
4	416A14	Cable, Battery Positive (15" Long) .....	1					
FIG. 20 - HOUSING PARTS GROUP								
1	331A20	Bushing, Conduitt - W/Locknut .....	1					
2	405C851	Panel, Rear End .....	1					
3	78143	Panel, Top Housing (Use this panel only on units with the following Engine Serial Numbers: - 69617 to 69823 inclusive, 85534 to 85537 inclusive, 141801 to 142254 inclusive, 142256 to 142396 inclusive, 142398 to 142593 inclusive, 163107 and 163108) .....	1					
3	405C939	Panel, Top Housing (Use this panel only on units with the following Engine Serial Numbers: - 142255, 142397, 163109 to 164085 inclusive, 174116 to 174462 inclusive, 174663 to 175800 inclusive, 182684 to 183476 inclusive and 187065 to 187760 inclusive) .....	1					
4	405A378	Nut, Inspection Cover .....	1					
5	405B938	Cover, Battery Inspection - W/Chain .....	1					
6	405C850	Panel, Front End .....	1					
7	405B854	Grille, Radiator Front Panel .....	1					
8	405A35	Cover, Bearing Inspection .....	2					
9	405C852	Panel, Housing Door .....	1					
10	78142B	Panel, Side - Left Hand .....	2					
11	75780	Pipe, Housing Spacer (Extra Strong) 1-1/2" x 23" .....	1					
12	78141B	Panel, Side - Right Hand .....	1					
13	405A44	Holder Assembly, Crank .....	1					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. NO.	PART NO.	DESCRIPTION	QUANTITY USED					
			A	B	C	D	E	F
FIG. 20 - HOUSING PARTS GROUP (Cont.)								
14	406-3	Fastener, Hood .....	4					
15	75766	Plate, Muffler Compartment Top .....	1					
16	75767	Support, Radiator .....	1					
17	520A309	Rod, Housing Tie .....	2					
18	75776	Plate, Bottom Dust .....	1					
19	75739A	"D" Ring and Clip (For Canvas Cover) .....	4					
20	78139	Saddle, Fuel Tank Mounting .....	1					
21	405A243	Spring, Front Engine Mounting .....	2					
22	78286	Mounting, Front Engine .....	1					
23	78074	Support, Crank .....	1					
24	416A340	Rack, Battery Top .....	1					
25	405C853	Support, Battery and Fuel Tank .....	1					
26	192-1	Crank, Manual Starting .....	1					
FIG. 21 - SUPPRESSION PARTS (Not Illustrated)								
NOTE: - Used only on units with the following Engine Serial Numbers: - 142255, 142397, 163109 to 164085 inclusive, 174116 to 174462 inclusive, 174663 to 175800 inclusive, 182684 to 183476 inclusive and 187065 to 187760 inclusive.								
153A69		Clip, Low Tension Lead - (2) Magneto to High Water Temperature Cut-off Switch, (4) Magneto Low Tension Stop Lead .....	6					
6702		Strap, Bond (Radiator Core to Front End Panel) 4" x 3/4" .....	2					
6704		Strap, Bond (Cylinder Head to Battery Shelf) 5" x 3/4" .....	1					
74958B		Bracket, Right Door Panel .....	1					
74961		Clip, Spring (Right Skid) .....	1					
74962		Bracket, Condenser Mounting .....	1					
74963		Spacer, Skid Bond .....	1					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!

REF. PART NO.	DESCRIPTION	QUANTITY USED					
		A	B	C	D	E	F
	FIG. 21 - SUPPRESSION PARTS (Not Illustrated) (Cont.)						
312A16	Condenser - .01 Mfd. - (2) AC Output Terminals, (2) Generator Collector Rings, (2) Positive Exciter Brush and (2) Convenience Receptacle .....	8					
232A191	Clamp, Generator Shaft (Condenser Terminal) .....	1					

WHEN ORDERING PARTS BE SURE TO INCLUDE MODEL AND SERIAL NUMBER OF UNIT!